

WHAT IS CLAIMED IS:

1. A magneto-optical recording medium comprising:
a substrate;

5 a first soft magnetic layer formed on the
substrate;

a cured resin layer formed on the first soft
magnetic layer having a pre-groove pattern on a surface to
a back of the cured resin layer contacting with the first
10 soft magnetic layer;

a recording reproduction layer formed on the cured
resin layer; and

a protective film layer formed on the recording
reproduction layer,

15 wherein the magneto-optical recording medium
receives an irradiation of a light for recording
reproduction and a supply of a magnetic field from a side
of the protective film layer, and

wherein a ratio $(Bs_2 \times t_2 / Bs_1 \times t_1)$ of a product
20 $Bs_2 \times t_2$ to a product $Bs_1 \times t_1$ is not less than 0.2, where
 t_1 denotes a film thickness of a second soft magnetic layer
constituting a recording head for supplying the magnetic
field to the magneto-optical recording medium, the
recording head having a magnetic field generating coil, Bs_1
25 denotes a saturation magnetic flux density of the second
soft magnetic layer, t_2 denotes a film thickness of the
first soft magnetic layer, and Bs_2 denotes a saturation

magnetic flux density of the first soft magnetic layer.

2. A magneto-optical recording medium comprising:

a substrate;

5 a first soft magnetic layer formed on the
substrate;

a cured resin layer formed on the first soft
magnetic layer having a pre-groove pattern on a surface to
a back of the cured resin layer contacting with the first
10 soft magnetic layer;

a recording reproduction layer formed on the cured
resin layer; and

a protective film layer formed on the recording
reproduction layer,

15 wherein the magneto-optical recording medium
receives an irradiation of a light for recording
reproduction and a supply of a magnetic field from a side
of the protective film layer, and

wherein the first soft magnetic layer is formed by
20 a metallic foil.

3. A magneto-optical recording medium according
to claim 1, wherein the first soft magnetic layer is formed
by a metallic foil.

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4. A magneto-optical recording medium according
to claim 2, wherein the metallic foil constituting the

first soft magnetic layer is put on the substrate.

5 5. A magneto-optical recording medium according
to claim 3, wherein the metallic foil constituting the
first soft magnetic layer is put on the substrate.

10 6. A magneto-optical recording medium according
to claim 2, wherein the metallic foil constituting the
first soft magnetic layer is formed in a united body with
the substrate.

15 7. A magneto-optical recording medium according
to claim 3, wherein the metallic foil constituting the
first soft magnetic layer is formed in a united body with
the substrate.

20 8. A magneto-optical recording medium according
to claim 1, wherein the substrate has a preventing
structure for preventing the cured resin layer from going
out from the first soft magnetic layer when the cured resin
layer is in a non-cured state.

25 9. A magneto-optical recording medium according
to claim 2, wherein the substrate has a preventing
structure for preventing the cured resin layer from going
out from the first soft magnetic layer when the cured resin
layer is in a non-cured state.

10. A magneto-optical recording medium according to claim 1, wherein the first soft magnetic layer includes a FeNi magnetic material.

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11. A magneto-optical recording medium according to claim 2, wherein the first soft magnetic layer includes a FeNi magnetic material.

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12. A magneto-optical recording medium according to claim 1, wherein the first soft magnetic layer includes a CoZrNb magnetic material.

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13. A magneto-optical recording medium according to claim 2, wherein the first soft magnetic layer includes a CoZrNb magnetic material.

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14. A magneto-optical recording medium according to claim 1, wherein the first soft magnetic layer is coated on the substrate.